

11. A retractable cable assembly, as used with an alarm system,  
2 comprising;

4 a housing;

6 means for retraction contained in said housing;

8 a multiconductor cable, having a first end attached to a sensor attachable  
10 to a product then extending into the housing, cooperating with the retraction means  
and a second end extending out of the housing, said sensor having two states, 1)  
secured when attached to the product with at least two conductors of the cable  
electrically connected and 2) unsecured when detached from the product with said at  
least two conductors electrically disconnected;

12 said retraction means urging the cable into the housing and thereby  
13 urging the first end connected to [a product] the sensor to the retraction means, yet  
14 allowing the first end to be pulled from the housing when an external force is exerted  
15 on the first end, while maintaining a continuous electrical path in said at least two  
conductors from the first end of the cable to the second end of the cable; and

16 means for connecting the second end of the cable to an alarm system  
17 which detects a) [a] the secured state with the [electrical path continuous between  
18 the first and second ends of the cable] at least two conductors of the cable electrically  
19 connected and b) an unsecured state with the [continuity of the electrical path  
20 between the first and second cable ends broken] at least two conductors of the cable  
electrically disconnected,

22 whereby a user can grasp and pull on a product attached to the first  
24 cable end to place the product in a comfortable position, but if the user breaks the

8

11/27/31 [continuity of the electrical path] electric connection of the at least two conductors of  
the cable the alarm system detects the unsecured state.

12. A retractable cable assembly, as used with an alarm system,

2 comprising:

4 a housing:

6 a cable having first and second conductors extending between opposite  
first and second ends of said cable;

8 means for attaching said cable first end to a product;

10 means for electrically connecting said first and second conductors at said  
first end of said cable whereby 1) said first and second conductors form an alarm loop  
extending from said cable second end through said first conductor to said cable first  
end and back through said second conductor to said cable second end when said  
attaching means attach said cable to a product and 2) said alarm loop is broken by  
detaching said cable from a product;

12 a connector for connecting said cable second end to an alarm system  
responsive to any break of the alarm loop; and

14 a retracting mechanism in said housing continuously urging the cable first  
end toward the housing yet allowing the cable first end to be pulled away from the  
housing when an external force is exerted on the cable first end.

13. The retractable cable assembly of claim 12, wherein said retracting  
mechanism continuously urges the cable first end toward the housing, whereby a user

4           can grasp and pull on a product attached to the cable first end to place the product  
          in a comfortable position with a minimum amount of cable extending from said  
          housing.

2           14. The retractable cable assembly of claim 13, wherein said retracting  
          mechanism comprises:

4           a pulley mounted for free rotation relative to said housing and including  
          a sensor hub and an alarm system hub separated by a disk, said disk having a hole  
          therein, whereby said cable extends from said cable first end into said housing where  
          it winds around said sensor hub then extends through said pulley disk hole and winds  
          about said alarm system hub then extends from said housing to said cable second  
          end; and

6           a spring continuously biasing said pulley toward winding said cable onto  
          said sensor hub.